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7 a main inductor arranged between a mains electricity input  
8 from said network and a mains electricity output to said  
9 consumer's premises to allow the low frequency high amplitude  
10 mains electricity power signal to pass through the main inductor  
11 in a low impedance path from the mains electricity input from  
12 said network to said mains electricity output to said consumer's  
13 premises for frequencies from zero frequency to a low frequency  
14 of said low frequency high amplitude mains electricity power  
15 signal; and

16 a coupling capacitor connected between said mains  
17 electricity input and a signal input/output line to allow the  
18 telecommunication signal to pass through the coupling capacitor  
19 in a path between said mains electricity input and the signal  
20 input/output line and to attenuate low frequency components of  
21 said low frequency high amplitude mains electricity power signal;

22 wherein the main inductor has an impedance for  
23 substantially preventing communications signals of at least one  
24 megahertz from passing from the mains electricity input from said  
25 network to said mains electricity output to said consumer's  
26 premises.

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1 Communications apparatus for use with an electricity  
2 distribution and/or power transmission network for allowing, in  
3 use, a low frequency high amplitude mains electricity power  
4 signal to pass from the network to a consumer's premises and for  
5 input and/or removal of a telecommunication signal from the  
6 network, said communications apparatus comprising:

7 a first inductor arranged between a mains electricity input  
8 from said network and a mains electricity output to said  
9 consumer's premises to allow the low frequency high amplitude  
10 mains electricity power signal to pass through the first inductor  
11 in a low impedance path from the mains electricity input from  
12 said network to said mains electricity output to said consumer's  
13 premises for frequencies from zero frequency to a low frequency  
14 of said low frequency high amplitude mains electricity power  
15 signal;

16 a series combination of a coupling capacitor and a fuse  
17 connected between said mains electricity input and a signal  
18 input/output line to allow the telecommunication signal to pass  
19 through the coupling capacitor and the fuse in a path between  
20 said mains electricity input and the signal input/output line and  
21 to attenuate low frequency components of said low frequency high  
22 amplitude mains electricity power signal;

23 a second inductor connected between said signal input/output  
24 line and ground, said second inductor providing a current path